10 March 1965

MEMORANDUM FOR THE RECORD

Subject: Photo Bleach Photography (Project No. 99832-5)

This idea seems interesting on first inspection, but I feel that more information is needed to clear up a few omissions in the proposal.

1. If the photo efficiency approaches unity, I feel that the starting size of the molecules required for a D max of 2.5-3.0 will have a serious effect on the resolution. Since the coating must be very thin in order to prevent a change in the structure of the photo-sensitive layer because of the possibility of induced voids and to allow free escape of the volatile portion of the molecule, we can't have multiple layers of smaller particles to achieve this D max.

2. What is the nature of the volatile material? Will it be toxic, flammible, required special treatment, etc.?

3. The exposure determination on page 9 using a red laser (ca 6300 A^{o}), was rigged in favor of the dyed film. The two silver halide films probably have greater sensitivities in the ultra-violet and blue end of the spectrum. This may mean that the dyed film is even less sensitive than reported.

4. If the by-products of the bleaching induce more bleaching to increase gain, what prevents a cascading system from bleaching out the whole film?

5. Any system that depends on heating for fixation may require special packaging to achieve the required storage or shelf life. What is the shelf life of an opened package?

These are a few of the questions that should be raised before this system is investigated at our expense. Will [redacted] self sponsor part or one half the research effort? This may be an indication that they feel there is hope for the system. 25X

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I have nothing to add to Hank's comme

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